

CLEAN COPY OF CLAIMS

IN THE CLAIMS:

1. (Amended) An electronically commutated motor comprising
a stator, a rotor (39), and a program-controlled
microprocessor, serving to control commutation of the motor;
an apparatus for sensing a time variable (t_H) that is substantially
inversely proportional to the rotation speed of the rotor (39);
an apparatus for calculating a time interval (t_{TI}) dependent on that
time variable (t_H);
an apparatus for triggering a motor control interrupt routine at an
instant offset (t_{TI}) from a predefined rotor position, that offset
corresponding to the time interval (t_{TI}) dependent on the sensed time
variable (t_H);
wherein the motor control interrupt routine contains program steps
(S310, S318, S320, S322) for effecting a commutation of the motor.
2. (Amended) The motor according to claim 1, wherein
the motor control interrupt routine comprises program steps (S304,
S306) which prevent a commutation from being effected if the time interval
(t_{TI}) dependent on the sensed time variable is greater than a time span
(t_H) presently required by the rotor (39) to travel through a predefined
angular distance.
3. (Amended) The motor according to claim 2, further comprising
an apparatus which triggers a rotor position-dependent interrupt
routine at predefined rotor positions.
4. (Amended) The motor according to claim 3, wherein
a timer (CNT_HL), controllable by the rotor position-dependent
interrupt routines, is provided, in order to sense the time variable that
is substantially inversely proportional to the rotation speed of the rotor.

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5. (Amended) The motor according to claim 4, wherein
the timer (CNT_HL) is also configured to trigger a motor control
interrupt routine.

6. (Amended) The motor according to claim 5, wherein
the timer (CNT_HL) is loadable, during a rotor position-dependent
interrupt, with a first predefined count value (t_B) which corresponds to
the time offset (t_TI) dependent on the sensed time variable (t_H);
and which brings about a motor control interrupt
after counting that first predefined count value.

7. (Amended) The motor according to claim 3, wherein
a rotor-position-dependent interrupt
has a higher priority than a motor control interrupt.

8. (Amended) The motor according to claim 4, wherein
the timer (CNT_HL) is loadable, during a motor control interrupt
(FIG. 10: S302), with a predefined count value (t_AR);
and, subsequent to that loading operation, a count is performed until
the next rotor position-dependent interrupt, so as to ascertain,
by taking the difference between the predefined count value (t_AR) and the
counter status (t_E) upon reaching the next rotor position-dependent
interrupt, a time offset between these interrupt operations.

9. (Amended) The motor according to claim 8, further comprising
an autoreload register (AR) for loading the predefined count value (t_AR),
which register stores the first predefined count value (t_TI) and feeds it
to the timer (CNT_HL) during the motor control interrupt (FIG. 10) as the
predefined count value.

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